

IN THE UNITED STATES DISTRICT COURT
FOR THE NORTHERN DISTRICT OF ILLINOIS
EASTERN DIVISION

| | | |
|----------------------|---|---------------------------|
| |) | |
| |) | Case No. 10 C 715 |
| TRADING TECHNOLOGIES |) | (Consolidated with: |
| INTERNATIONAL, INC. |) | 10 C 716, 10 C 718, |
| |) | 10 C 720, 10 C 721, |
| Plaintiff, |) | 10 C 726, 10 C 882, |
| v. |) | 10 C 883, 10 C 884 |
| |) | 10 C 885, 10 C 929, |
| BCG PARTNERS, INC. |) | 10 C 931) |
| |) | |
| Defendant. |) | Judge Virginia M. Kendall |
| |) | |

MEMORANDUM OPINION AND ORDER

In early 2010, plaintiff Trading Technologies International, Inc. (“TT”) filed a dozen cases in this District alleging infringement of various patents concerning electronic trading software that traders use to place orders on electronic exchanges like Chicago’s Mercantile Exchange and Board of Trade. Specifically, the patents at issue concern the functionality in the software that displays market information to traders and allows them to submit orders to those exchanges and others to make their trades. After the Court consolidated the cases, the parties identified several issues to be decided as a matter of law that would help the parties streamline discovery and potentially resolve the cases between them. Pursuant to this Court’s order, the parties submitted cross-motions for summary judgment on the following issues:

1. Whether a particular part of the sole independent claim relating to user input of default quantities in TT’s patent no. 7,553,056 (‘056 patent)—which TT has asserted against every defendant—meets 35 U.S.C. § 112’s written description requirement; and
2. Whether the claims of TT’s patent no. 7,676,411 (‘411 patent), which claim price axes that are static as well as ones that move automatically, are invalid for lack of a written description in light of the Federal Circuit’s analysis and

decision in *Trading Technologies, International, Inc. v. eSpeed, Inc.*, 595 F.3d 1340 (Fed. Cir. 2010) (“*eSpeed* Decision”).

Specifically, with respect to the ‘056 patent, the parties disagree whether the ‘056 patent’s specification discloses the concept of a trader selecting and then using a default quantity for multiple orders. As for the ‘411 patent, the parties dispute whether the Federal Circuit’s comments on patent no. 6,772,132’s (‘132 patent) specification—which is the same specification used by the ‘411 patent—means that the specification discloses only static price axes (that is, price axes that move only after the user re-centers them manually), and that consequently the claims in the ‘411 patent that cover price axes in general (including, presumably, those that move on their own) are too broad.

Before the Court entered its scheduling order directing the parties to brief these preliminary matters, Defendants TradeStation Securities, Inc. and TradeStation Group, Inc. (together, “Tradestation”) moved for partial summary judgment, asserting that in light of the *eSpeed* Decision, various patents in TT’s “Brumfield family” that the United States Patent and Trademark Office (“PTO”) issued in 2010, including the ‘411 patent, are not entitled to claim priority from earlier filings. TT concedes that, because the ‘411 patent shares a specification with those earlier filings, if the ‘411 patent’s claims are held invalid based on the *eSpeed* Decision, then the issue of priority is moot. The defendants other than Tradestation note that the written description analysis is the same under either approach. In short, Tradestation’s motion is really a spin on the other summary judgment motion (which TradeStation joined) and rises and falls with the Court’s interpretation of the *eSpeed* Decision.

Finally, Defendants Open E Cry, LLC and optionsXpress Holdings, Inc. (together “OEC”) filed a separate motion for partial summary judgment, also based on the *eSpeed* Decision, asserting

that TT should be barred from asserting that products with price axes that move automatically infringe under the doctrine of equivalents, because the Federal Circuit found that TT disclaimed all price axes that move automatically when it prosecuted the claims of the ‘132 patent and another parent patent.

For the reasons below, the Court:

1. grants TT’s cross-motion for summary judgment (Doc. 393) and denies the moving defendants’ motion (Doc. 372) with respect to the ‘056 patent;
2. grants the moving defendants’ motion for summary judgment (Docs. 375/378) that under the *eSpeed* Decision, the ‘411 patents claims are invalid to the extent they cover price axes that move automatically or through automatic re-centering and denies TT’s cross-motion that the ‘411 patent’s claims meet the written description requirement (Doc. 394);
3. denies as moot Tradestation’s motion for summary judgment (Docs. 178/181) concerning the priority issue of the ‘411 patent;
4. grants OEC’s motion for summary judgment regarding prosecution history estoppel (Doc. 377) with respect to the first set of Brumfield family patents, denies it as moot with respect to the second set of Brumfield family patents, and denies TT’s cross-motion (Doc. 394).

I. MATERIAL UNDISPUTED FACTS

A. ‘056 Patent Specification and Claims¹

TT owns the ‘056 patent, issued by the PTO on May 12, 2009 from application no. 11/417,544, filed on May 3, 2006. (TT ‘056 56.1 Resp. ¶ 1.)² The ‘544 application was a

¹TT and the moving defendants filed expert declarations in support of their cross-motions on the issue of whether the specific claim language at issue in the ‘056 patent met the written description requirement. Because the Court determines below that, as a matter of law based on the specification itself, no reasonable fact-finder could find that the language does not meet the written description requirement, the Court does not consider those expert declarations. *See Anascape, Ltd. v. Nintendo of Am., Inc.*, 601 F.3d 1333, 1339 (Fed. Cir. 2010) (setting aside an expert’s conclusion because it could not “override the objective content” of the specification at issue).

²The parties filed two separate sets of Local Rule 56.1 statements: one set pertaining to the ‘056 patent and the other set pertaining to the *eSpeed* Decision and the ‘411 patent.

continuation of an earlier application, no. 09/289/550, which was filed on April 9, 1999 and issued as patent no. 7,212,999 on May 1, 2007. (*Id.* at ¶ 2; Def. ‘056 56.1 Resp. ¶ 4.) The ‘056 patent’s specification is the same, in all relevant respects, to the specification submitted in 1999 as part of the ‘550 application. (TT ‘056 56.1 Resp. ¶ 5.)

According to the ‘056 patent’s specification, the invention disclosed is a “user interface for an electronic trading exchange which allows a remote trader to view in real time bid orders, offer orders, and trades for an item.” (TT ‘056 56.1 Resp. ¶ 5; Doc. 396-1 at 1.) More specifically, the interface displays all the outstanding bids and offers for an item (rather than just the highest bid and lowest offer), which “allows the trader to view trends in orders for an item, and thus better enables the trader to anticipate demand for the item.” (TT ‘056 56.1 Resp. ¶ 7.) The specification describes various types of interfaces, but for purposes of the issue of user input of default quantities, the parties focus on the “priority view,” shown by the following diagram from the specification:

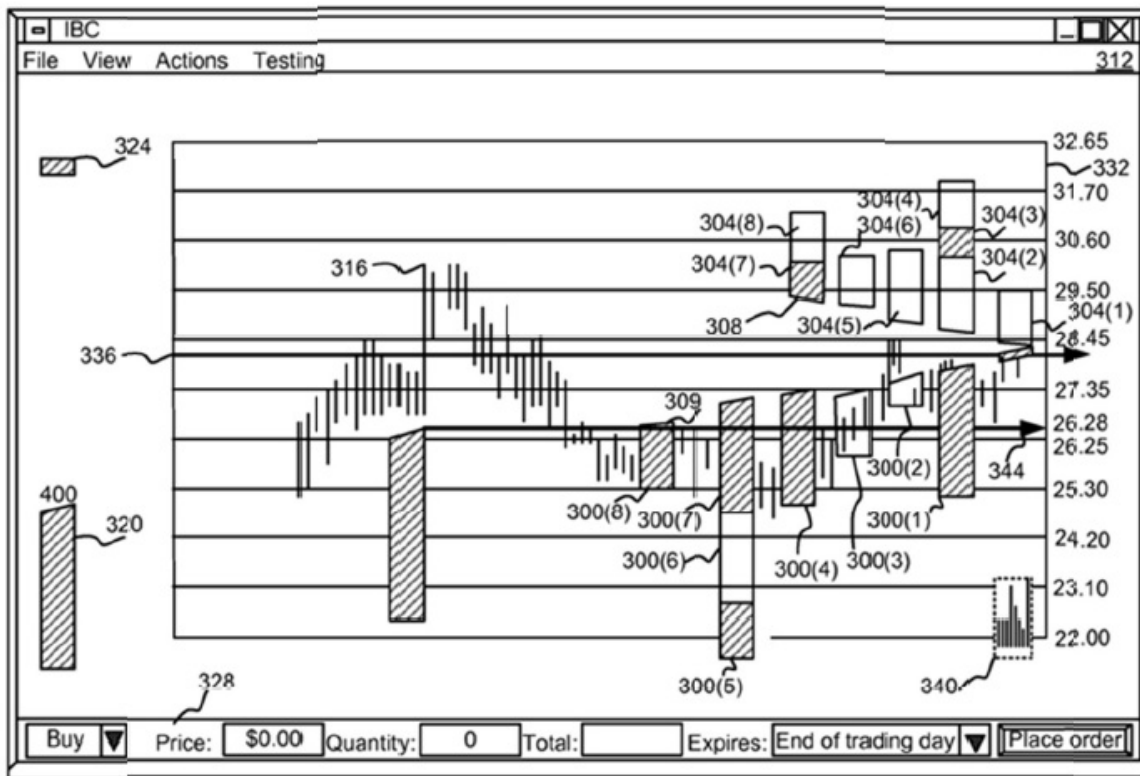


FIG. 3A

(TT ‘056 56.1 Resp. ¶ 10; Def. ‘056 56.1 Resp. ¶ 5.) The figure shows the y (or “value”) axis (332), with icons representing bids (labeled 300(_)) and offers (labeled 304(_)). (TT ‘056 56.1 ¶ 11.) The relative size of each order is represented by the vertical size of the icon, with larger icons representing larger orders; where there is more than one order at a given value (like 300(5), 300(6) and 300(7) above), the orders are “stacked,” one on top of the other, based on their priority. (*Id.*) As shown on the left side of the figure, the priority view includes a bid token (labeled 320) and an offer token (labeled 324). (Def. ‘056 56.1 Resp. ¶ 6.) Per the specification, to submit an order for a trade, the trader selects one of the tokens on the left side with his mouse and resizes it to the desired amount (again, a larger token representing a larger offer or bid). (*Id.* at ¶ 10; TT ‘056 56.1 Resp. ¶ 14.) Specifically, with respect to the re-sizing of the tokens, the specification states:

After being selected, the trader adjusts the size of the offer or bid token 324, 320 until the size of the token matches the desired quantity of the order.

(Def. '056 56.1 Resp. ¶ 20.) After resizing the token, the trader drags it to the location on the screen with the desired price and releases it to start the order process. (Def. '056 56.1 Resp. ¶ 10; TT '056 56.1 Resp. ¶ 14.) For instance, the arrows in the above figure (which appear in the specification) show a trader dragging a bid token into the window at a specific price. (Def. '056 56.1 Resp. ¶ 17; TT '056 56.1 Resp. ¶ 14.)³ This triggers a pop-up window to confirm the trade; the system auto-populates the window with the quantity reflected by the size of the token and the price corresponding to the location where the trader dragged the token. (Def. '056 56.1 Resp. ¶¶ 10, 20, 23; TT '056 56.1 Resp. ¶ 14.) The trader may, but does not have to, modify the auto-populated information before submitting the order. (Def. '056 56.1 Resp. ¶ 10.)⁴

The specification does not describe tokens that have no size (and thus no quantities associated with them). (*Id.* at ¶ 14.) The diagrams show that when the tokens are not being used in the order process, they remain visible on the side, and the specification has no disclosure that the tokens ever disappear or are set to zero after the trader enters an order. (Def. '056 56.1 Resp. ¶¶ 16, 19.) The specification and the originally filed claims do not require a user to specify a different

³The trader can also enter an order without tokens by using the order task bar at the bottom of the screen. (TT '056 56.1 Resp. ¶ 16.)

⁴The specification describes two other “views” in addition to the priority view, namely the “value/quantity view” and the “trading pit view.” (TT '056 56.1 Resp. ¶¶ 8, 19.) Unlike the priority view, these views do not use the size of tokens to indicate order quantity. For instance, the value/quantity view uses bid and offer tokens, but the trader selects the quantity by putting the token on a quantity axis, not by resizing the token. (*Id.* at ¶¶ 19-20.) The trading pit view, per the specification, provides a visual representation of the activity level of various traders in a pit, which helps a trader determine how volatile prices will be. (*See* Doc. 396-1 at Col. 12; TT '056 56.1 Resp. ¶¶ 24-25.) For the purposes of the cross-motions, it is sufficient to note for these other views, the specification does not use the term “default quantity” and these views do not utilize re-sizable tokens to put in order quantity. (*Id.* at ¶¶ 20, 22, 26.)

quantity for each order, though a flowchart for the priority view lists “receive a quantity specified for order” as a step in the order process. (*Id.* at ¶¶ 24, 26, 28-30, 32-33; TT ‘056 56.1 Resp. ¶ 15.) The words “default quantity” do not appear anywhere in the specification for the ‘056 patent, nor did the term appear in the original claims presented as part of the ‘544 application. (TT ‘056 56.1 Resp. ¶¶ 17, 29, 35.) The claims for the priority view, as originally presented to the PTO in the ‘544 application, read in part as follows:

1. A method for displaying transactional information regarding the buying and selling of items in a system where orders comprise a bid type or an offer type, and an order is generated for a quantity of items at a specific value, the method comprising:

displaying at least one bid icon, corresponding to a bid for a quantity of items, at a location along a first axis of values corresponding to the value of the bid; and

displaying at least one offer icon, corresponding to an offer type order for a quantity of items, at a location along a first axis of values corresponding to the value of the offer.

2. The method of claim 1 further comprising:

providing an order token whose size is adjustable by the user to reflect the quantity of the order.
3. The method of claim 2 wherein providing an order icon further comprises:

providing an order icon which can be moved to a location corresponding to the value of the order.

* * *

16. The method of claim 1 further comprising:

receiving a new order for a quantity of items for a specified

value;

generating an order icon whose size corresponds to the quantity of items for which the offer is made; and

placing the order icon at a location with respect to the axis of values corresponding to the specified value of the offer.

(*Id.* at ¶¶ 30, 32-33.) In June 2007, a month after the ‘999 patent issued, TT presented 15 amended claims that would, with immaterial changes, issue as the claims in the ‘056 patent. (*Id.* at ¶¶ 37, 41.)

The amendments to claim 1 (additions underlined, deletions struck out) are as follows:

1. (Currently Amended) A method of operation used by a computer for displaying transactional information and facilitating trading ~~regarding the buying and selling of items~~ in a system where orders comprise a bid type or an offer type, ~~and an order is generated for a quantity of items at a specific value~~, the method comprising:

receiving bid and offer information for a product from an electronic exchange, the bid and offer information indicating a plurality of bid orders and a plurality of offer orders for the product;

displaying a plurality of bid indicators representing quantity associated with the plurality of bid indicators being displayed at locations corresponding to prices of the plurality of bid orders along an axis of prices; at least one bid icon, corresponding to a bid for a quantity of items, at a location along a first axis of values corresponding to the value values of the bid; and

displaying a plurality of offer indicators representing quantity associated with the plurality of offer orders, the plurality of offer indicators being displayed at locations corresponding to prices of the plurality offer orders along the axis of prices; at least one offer icon, corresponding to an offer type order for a quantity items, at a location along the first axis of values corresponding to the value of the offer.

receiving a user input indicating a default quantity

to be used to determine a quantity for each of a plurality of orders to be placed by the user at one or more price levels;

receiving a user input indicating a desired price for an order to be placed by the user, the desired price being specified by a selection of one of a plurality of locations corresponding to price levels along the price axis, and

Sending the order for the default quantity at the desired price to the electronic exchange.

(*Id.* at ¶ 39; bolded language added). The bolded language regarding “default quantity” above, the language at the heart of the dispute on the parties cross-motions, was one limitation TT used to distinguish prior art. (*Id.* at ¶ 40.)

B. ‘411 Patent⁵

1. The ‘132 and ‘411 Patents and Their Common Specification

TT owns the ‘411 patent, which issued from application no. 11/585,907, filed October 25, 2006. (Def. ‘411 56.1 Resp. ¶ 4.) The ‘411 patent is a continuation of application no. 09/590,692 (filed June 9, 2000), which in turn claims priority from provisional application no. 60/186,322 (filed March 2, 2000). (*Id.*) The ‘692 application eventually issued as the ‘132 patent, also owned by TT and also claiming priority from the ‘322 application. (*Id.*; TT ‘411 56.1 Resp. ¶ 5.) In short, the ‘411 and ‘132 patents claim priority from the same provisional application and the ‘411 patent at issue has, for all relevant purposes, the same specification as the ‘132 patent at issue in the *eSpeed*

⁵The Court ignored the moving defendants’ “replies” to TT’s responses to the moving defendants’ Local Rule 56.1 facts. (*See* Doc. 412.) Local Rule 56.1 does not provide for replies and only permits the moving party to put facts before the Court once. *See* L.R. 56.1; *Koszola v. Bd. of Ed. of Chicago*, 385 F.3d 1104, 1109 (7th Cir. 2004) (district court has broad discretion to require compliance with Local Rule 56.1); *see also Woods v. Von Maur, Inc.*, No 09 C 7800, 2011 WL 3796724, at *4 (N.D. Ill. Aug. 24, 2011) (Kendall, J.); *Trepanier v. Davidson*, No. 03 C 6687, 2006 WL 1302404 at *1 n.3 (N.D. Ill. May 5, 2006) (noting it is improper to file replies within the Local Rule 56.1 factual framework).

Decision. (*Id.* at ¶¶ 6, 23.)

As general background, the common specification states:

Specifically, the present invention is directed to a graphical user interface for displaying the market depth of a commodity traded in a market, including a dynamic display for a plurality of bids and for a plurality of asks in the market for the commodity and a static display of prices corresponding to the plurality of bids and asks.

(*Id.* at ¶¶ 7, 11.) In other words, the specification discloses that the software has a graphical interface that dynamically displays bids (offers to buy) and asks (offers to sell) in a market for a particular item. (*Id.* at ¶ 8.) The following figures, reproduced from the common specification, are helpful:

FIG. 3

| SYCOM FGBL DEC99 | | | | | |
|------------------|----------|------|------|-----|-----|
| E/W | 10:48:44 | BidQ | AskQ | Prc | LTO |
| 1009 | L 3 | | 104 | 99 | |
| 1010 | R 5 | | 24 | 98 | |
| 1011 | 720 | | 33 | 97 | |
| 1012 | X 10 | | 115 | 96 | |
| 1013 | 0 | | 32 | 95 | |
| 1014 | 10 1H | | 27 | 94 | |
| | 50 3H | | 63 | 93 | |
| 1007 | 1K 5H | | 45 | 92 | |
| | CLR | | 28 | 91 | |
| 1015 | X 10 | | 20 | 90 | 10 |
| 1016 | 17 | | 18 | 89 | |
| | CXL | | 97 | 88 | |
| 1008 | B 0 W 15 | | 30 | 87 | |
| | B 0 W 13 | | 43 | 86 | |
| 1017 | NET 0 | | 110 | 85 | |
| 1018 | NET REAL | | 23 | 84 | |
| 1019 | | | 31 | 83 | |
| 1021 | | | 125 | 82 | |
| | | | 21 | 81 | |

FIG. 4

| SYCOM FGBL DEC99 | | | | | |
|------------------|----------|------|------|-----|-----|
| E/W | 10:48:44 | BidQ | AskQ | Prc | LTO |
| | L 3 | | 104 | 99 | |
| | R 5 | | 24 | 98 | |
| | 720 | | 33 | 97 | |
| | X 10 | | 115 | 96 | |
| | 0 | | 32 | 95 | |
| | 10 1H | | 27 | 94 | |
| | 50 3H | | 63 | 93 | 10 |
| S 10 W 14 | 1K 5H | | 45 | 92 | |
| | CLR | | 28 | 91 | |
| | X 10 | | 20 | 90 | |
| | 17 | | 18 | 89 | |
| | CXL | | 97 | 88 | |
| B 0 W 15 | | | 30 | 87 | |
| B 0 W 13 | | | 43 | 86 | |
| | NET 0 | | 110 | 85 | |
| | NET REAL | | 23 | 84 | |
| | | | 31 | 83 | |
| | | | 125 | 82 | |
| | | | 21 | 81 | |

(Doc. 380-1, ‘132 patent spec., at 6-7.) In the part of the specification that describes the figures, it states:

The values in the price column are static, that is, they do not normally change positions unless a re-centering command is received (discussed in detail later). The values in the Bid and Ask columns, however, are dynamic; that is, they move up and down (in the vertical example) to reflect the market depth for the given commodity.

(TT ‘411 56.1 Resp. ¶ 12; ‘132 patent spec. at col. 7, ll. 46-51.) Referencing the difference between figure 3 and figure 4 above, the specification explains that in latter, which reflects a market change, “the price column remained static, but the corresponding bids and asks rose up the price column.” (*Id.* at col. 8, ll. 45-48.)⁶ As discussed in the specification, displays like figures 3 and 4 are easier for traders to follow than displays that always kept the inside market in the same squares on a grid. (Def. ‘411 56.1 Resp. ¶¶ 22-25; ‘132 Patent Spec. at Fig. 2; Col. 6, ll. 60-65.) Specifically, displays like those in figures 3 and 4 “fluctuate[] logically up or down . . . as the market prices [sic] fluctuates. This allows the trader to place trade orders quickly and efficiently.” (Def. ‘411 56.1 Resp. ¶ 26.)

As for the re-centering feature mentioned in the above quote, the only explicit example of re-centering in the specification reads as follows:

As the market ascends or descends the price column, the inside market⁷ might go above or below the price column displayed on a trader’s screen. Usually a trader will want to be able to see the inside market to assess future trades. The system of the present invention

⁶The ‘411 patent claims priority from the ‘322 provisional application, which describes the price axis as follows: “The inside market and market depth ascend and descend as prices in the market increase and decrease. For example, [when the inside market changes,] [t]he price column remained static, but the corresponding bids and asks rose up the price column.” (Doc. 427, TT ‘411 Resp. Add’l Facts ¶ 4.)

⁷As used in the specification, the “inside market” refers to the highest bid and lowest offer for the particular item. For example, the 1020 and 1101 notations in figures 3 and 4 above indicate the inside market.

addresses this problem with a one-click centering feature. With a single click . . . the system will re-center the inside market on the trader's screen.

(TT '411 56.1 Resp. ¶ 13; Def. '411 56.1 Resp. ¶ 15.) Similarly, provisional application '322, from which the '132 and '411 patents claim priority, states in reference to figures identical to figures 3 and 4:

The inside market and market depth ascend and descend as prices in the market increase and decrease. [After the market change, the] price column remained static, but the corresponding bids and asks rose up the price column.

(*Id.* at ¶ 16; Doc. 395-1, '322 app., at 53, 58-59.) The provisional application also provides, as a separate innovation, the one-click re-centering described in the common specification. (Def. '411 56.1 Resp. ¶ 16.)

The claims of the '132 patent, in turn, all have the limitation of a "static display of prices."

(TT '411 56.1 Resp. ¶ 14.) For instance, claim 1 of the '132 patent reads:

A method of placing a trade order for a commodity on an electronic exchange having an inside market with a highest bid price and a lowest ask price, using a graphical user interface and a user input device, said method comprising:

setting a preset parameter for the trade order

displaying market depth of the commodity, through a dynamic display of a plurality of bids and a plurality of asks in the market for the commodity, including at least a portion of the bid and ask quantities of the commodity, the dynamic display being aligned with a static display of prices corresponding thereto, wherein the static display of prices does not move in response to a change in the inside market.

displaying an order entry region aligned with the static display prices comprising a plurality of areas for receiving commands from the user input devices to send trade orders, each area

corresponding to a price of the static display of prices.

(Doc. 380-1, Ex. 1, ‘132 patent, col. 12, ll. 2-21.) On the other hand, the claims of the ‘411 patent, after a number of application amendments filed by TT that removed references to static prices, do not use “static” as a limitation on the type of price axis disclosed. (TT ‘411 56.1 Resp. ¶¶ 25-30.) Rather, for the ‘411 claims, TT replaced the references to static with language that requires that the bid and ask indicators to move relative to the price axis, a concept TT calls “relative movement.” (Def. ‘411 56.1 Resp. ¶ 27.) As an example, one of the two independent claims in the ‘411 patent states, in part:

A method of displaying market information relating to and facilitating trading of a commodity being traded on an electronic exchange, the method comprising:

receiving, by a computing device, market information for a commodity from an electronic exchange, the market information comprising an inside market with a current highest bid price and a current lowest ask price;

displaying, via the computing device, a bid display region comprising a plurality of graphical locations, each graphical location in the bid display region corresponding to a different price level of a plurality of price levels along a price axis.

(Doc. 380-1, Ex. 10, ‘411 patent, col. 12, ll. 23-34; TT ‘411 56.1 Resp. ¶¶ 32-33, 35.)⁸

According to TT, the price axis claimed by the ‘411 patent is the column labeled 1005 in figure 3 above. (TT ‘411 Facts ¶ 7.) As with the ‘132 patent, in the ‘411 patent the bid indicators appear at column 1003, the ask indicators in column 1004, and the inside market at 1020. (Def. ‘411

⁸The other independent claim, no. 26, concerns a “[c]omputer readable medium having stored therein instructions for execution by a computer to perform” various method steps, including “displaying, via the computing device, a bid display region comprising a plurality of graphical locations, each graphical location in the bid display region corresponding to a different price level of a plurality of price levels along a price axis.” (TT ‘411 56.1 Resp. ¶¶ 32-34.)

56.1 Resp. ¶¶ 8-10.) In figure 4, intended to show an example of a market movement, the inside market has moved up the price axis, as denoted by 1101. (Def. '411 56.1 Resp. ¶¶ 11-13.) The '411 patent's examiner, who also examined the '132 patent, never rejected the price axis claims in the '411 patent for lack of a written description. (*Id.* at ¶¶ 28-29.)

2. Other Brumfield Family Patents

The '132 patent is one of what the parties refer to as TT's "Brumfield family" of patents. (TT '411 56.1 Resp. ¶ 52.) Every claim of the '132 patent either recites the limitation "static display of prices" or depends on a claim that recites the same. (*Id.*; Def. '411 56.1 Resp. ¶ 46.) Patent no. 6,766,304 ('304 patent), which issued on July 20, 2004, is a divisional of the '132 patent and each of its claims either recites the limitation "static price axis" or depends on a claim that does. (TT '411 56.1 Resp. ¶ 53; Def. '411 56.1 Resp. ¶ 47.) For instance, the first independent claim of the '304 patent reads as follows:

A method for displaying market information relating to and facilitating trading of a commodity being traded in an electronic exchange having an inside market with a highest bid price and a lowest ask price on a graphical user interface, the method comprising:

dynamically displaying a first indicator in one of a plurality of location in a bid display region, each location in the bid display region corresponding to a price level along a common static price axis, the first indicator representing quantity associated with at least one order to buy the commodity at the highest bid price currently available in the market;

dynamically displaying a second indicator in one of a plurality of locations in an ask display region, each location in the ask display region corresponding to a price level along the common static price axis, the second indicator representing quantity associated with at least one order to sell the commodity at the lowest ask price currently available in the market;

displaying the bid and ask display regions in relation to fixed price levels positioned along the common static price axis such that when the inside market changes, the price levels along the common static price axis do not move and at least one of the first and second indicators moves in the bid or ask display regions relative to the common static price axis;

displaying an order entry region comprising a plurality of locations for receiving commands to send trade orders, each location corresponding to a price level along the common static price axis

(Doc. 380-3, Ex. 16, ‘304 patent spec. col. 12 ll. 35-65.)

Patent nos. 7,725,382 (‘382 patent), and 7,813,996 (‘996 patent), both of which issued in 2010, are continuations of the ‘132 patent. (TT ‘411 56.1 Resp. ¶¶ 54-55.) Patent no. 7,685,055 (‘055 patent), which also issued in 2010, is a continuation-in-part of the ‘132 patent. (*Id.* at ¶ 56.) Because it is only a continuation-in-part of the ‘132 patent, the ‘055 patent has a different specification than the ‘132 and ‘304 patents, including matter that explicitly relates to automatic re-centering. (Def. ‘411 56.1 Resp. ¶ 38.) Each of the claims of ‘382, ‘996 and ‘056 patents has the limitation “static price axis,” or depends on a claim that does. (TT ‘411 56.1 Resp. ¶¶ 54-56; Def. ‘411 56.1 Resp. ¶¶ 30, 34, 37.) For instance, one of the two independent claims of the ‘382 patent reads, in part:

A method of canceling an order entered for a commodity at an electronic exchange, the method comprising:

* * *

dynamically displaying by a computing device a first indicator at a first area corresponding to a first price level along a static price axis, the first price level along a static price axis, the first indicator being associated with the current highest bid price for the commodity;

dynamically displaying by the computing device a second indicator at a second area corresponding to a second price level along the static price axis, the second indicator being associated with the current lowest ask price for the commodity;

updating the dynamic display of the first and second indicators such that at least one of the first and second indicators is moved relative to the static price axis to a different area corresponding to a different price level along the static price axis in response to the receipt of new data representing a new inside market;

displaying by the computing device an order entry region comprising a plurality of areas, each area corresponding to price level along the static price axis and each area being selectable by a user input device so as to receive a command to send an order message based on the trade order parameter and the price level that corresponds with the selected area to the electronic exchange;

displaying by the computing device an entered order indicator at a location corresponding to a particular price level along the static price axis, the entered order indicator being associated with an order entered at the electronic exchange at the particular price level

(Doc. 380-3, Ex. 17, col. 12, ll. 20-55.) The claims of the ‘996 patent and ‘055 patent use the term “static price axis” in the same way as the ‘382 patent. (See Doc. 380-3, Ex. 18, ‘996 patent cols. 11-12, 14; Doc. 380-4, Ex. 19, ‘055 patent cols. 34-36.)

During the prosecution of the ‘382 patent, the patent examiner never corrected the following summary of his communication with TT:

The Examiner acknowledged that the term “static” is not limited to situations where the price levels do not change positions unless a manual recentering command is received, but includes situations where the price levels change positions in response to either a manual (under the control of the user) or automatic (outside of the user’s control) re-positioning command.

(Def. '411 56.1 Resp. ¶ 33.) Similarly, during the prosecution history of the '996 patent, the Examiner did not correct the following summary provided by TT:

[T]hroughout the extensive file history of this and related applications, including a thorough reexamination confirming patentability of the '132 and '304 patents, [TT] has not disclaimed or disavowed (e.g., to distinguish over cited art or for any other reason) a 'static' price axis in which there is a possibility that the price levels change positions automatically. Indeed, the fact that a price axis can be re-centered is indicative that the price axis is static, but a static price axis is not defined by how it is re-centered.

(Def. '411 56.1 Resp. ¶ 36.) During the prosecution of the '055 patent, TT commented that the static price axis "is automatically repositioned when a designated price is within a designated number of price levels from a lowest or highest value along the static price axis of the displayed plurality of price levels." (*Id.* at ¶ 39, Doc. 395-16 at 8.) TT concedes that the Federal Circuit issued its *eSpeed* Decision after the examiner allowed the claims of the '382 patent. (TT '411 Resp. Add'l Facts ¶ 9.)

3. The *eSpeed* Decision⁹

a. Claim Construction

In 2004, TT brought suit in this District against various defendants (including some of the defendants in the present action), asserting that their products infringed on the '132 patent, as well as the '304 patent, which also shares the same specification as the '132 and '411 patents. (TT '411 56.1 Resp. ¶ 18.) The district court found that the defendants infringed the '132 and '304 patents with one accused product, but not as to two other products. In the *eSpeed* Decision, issued February

⁹TT cross-moved for summary judgment, asserting that independent of the *eSpeed* Decision, the '411 patent's claims meet the written description requirement. As detailed below, the Court finds as a matter of law that the *eSpeed* Decision controls and the '411 patent's claims are invalid to the extent they claim price axes that move automatically. Consequently, as with the '056 patent issue, the Court does not reach the factual assertions raised by the expert declarations filed in support and in opposition to TT's cross-motion.

25, 2010, the Federal Circuit affirmed the district court in all respects. *See* 595 F.3d at 1345.¹⁰

In the *eSpeed* Decision, the Federal Circuit began by summarizing the advantages of the invention disclosed over prior art as described by the specification. The court noted the prior art displays had grids for the inside market that never changed locations. The problem with this prior art was that sometimes the prices in the inside market boxes changed rapidly, and as traders sent in orders, those prices would change. “In a fast moving market, missing an intended price could happen often and have very significant economic consequences,” the court wrote, and “[t]he invention addressed the problem by implementing static price levels.” Expanding on the advantages of static price levels and citing the specification, the Court wrote:

The claimed invention features static price levels. These unmoving figures have numerous advantages over the prior art. First, a trader can visually follow the market movement as the inside market shifts up and down along the price column. Second, and perhaps most important, a trader has confidence in making an offer at the intended price. Because the invention has static price levels, the order entry region will remain associated with the same price. Therefore, the trader does not need to worry about ‘clicking on’ or entering an order at the instant after a price change. Thus, the invention prevents accidental orders at an unintended price. The patents tout that these improvements ensure fast and accurate execution of prices.

Describing figures 3 and 4 above, the Court noted that in figure 4, “while the inside market has changed, the values in the price column remained fixed” until re-centered by the user.

Unlike the claims of the ‘411 patent, all the claims at issue in the ‘132 and ‘304 patents considered by the *eSpeed* Decision had the explicit limitation of a “static display of prices.” As laid out by the Federal Circuit, the dispute in that case centered on whether various accused products had

¹⁰ In their Local Rule 56.1 statements, the parties make various statements of undisputed facts with respect to the *eSpeed* Decision which, not surprisingly, are disputed by the other side. Because interpreting the *eSpeed* Decision is a question for the Court, the Court provides its own summary of the relevant parts above.

a static price axis, which in turn depended “on the way that the accused products re-center the price levels when the inside market moves away from the center of the display.” One of the accused products re-centered the prices automatically and instantaneously, while the other product allowed the entire display to slowly “drift” toward the center after each change in the inside market.

Though this case is not at the claim construction phase, for purposes of the parties instant motions, the Federal Circuit’s review of the district court’s construction of “static display of prices”—more specifically, just “static”—is most relevant, because the court made a number of comments regarding the common specification at issue here. The district court had found that the “static” limitation meant “the price axis never changes positions unless by manual re-centering or re-positioning,” and therefore the ‘132 and ‘304 patents “only cover software with a manual re-centering feature and without [an] automatic re-centering feature.” Reviewing that construction, the Federal Circuit noted “the inventors acted as their own lexicographers” when they defined the word static in the specification by writing “[t]he values in the price column are static; that is, they do not normally change positions unless a re-centering command is received.” The court then noted that the “rest of the specification” supported the district court’s construction because: (1) the inventors defined the term “static” in the specification, and the specification only referenced manual re-centering, not automatic re-centering; and (2) the specification uses the term “the present invention” with respect to the manual re-centering feature, which strongly suggests that the claimed re-centering command requires a manual input.” Recognizing that its review of the lower court’s claim construction “relies heavily on the specification,” the Federal Circuit took solace in the specification use of the term “the present invention” rather than “a preferred embodiment.”

Returning to the invention’s improvement over the prior art, the Court reasoned that

“allowing the price axis to automatically change positions would defy the invention’s goal to [as stated in the specification] to ‘ensure fast and accurate execution of trades’ . . . [t]he invention would present the same problem as the prior inventions if the price axis moved automatically even in rare instances . . . [namely,] the ‘static display of prices’ could automatically re-center just as the trader was getting ready to execute a trade, causing the trader to miss the intended price.” The court concluded that “[t]he invention’s contribution to the prior art, its specification, and its prosecution history show that the static display of prices cannot move without a manual re-centering command from the trader.”

b. Doctrine of Equivalents and Prosecution History Estoppel

In the *eSpeed* Decision, the Federal Circuit also affirmed the lower court’s ruling that TT could not assert that the accused products infringed under the doctrine of equivalents. As to the accused product that only occasionally re-centered, the Federal Circuit found:

the occasional automatic re-centering [by the accused product] is not merely an insubstantial variation. The relevant standard for measuring the difference in this instance is not the frequency of automatic re-centering. Instead this court must detect the difference between a price axis that moves only in response to the trader’s instruction and a price axis that adjusts itself without prompting. The difference is not subtle . . . this difference lies at the heart of the advantages of the patented invention over the prior art. Specifically, the invention ‘ensures fast and accurate execution of trades.’ The [accused product’s] automatic re-centering feature still present the potential problem of the prior art that allowed the inside market price to move while a trader was trying to secure a deal. Thus [the accused product’s] is substantially different from the claimed invention and cannot fall within the scope of the claims under the doctrine of equivalents without doing violence to the ‘static’ claim element.

As to the other product at issue, the Federal Circuit agreed with the district court that prosecution history estoppel precluded TT from asserting the product infringed under the doctrine of equivalents.

Specifically, the court noted that in response to a prior art , TT amended what would become Claim 1 of the ‘132 patent by inserting the language “wherein the static display of prices does not move in response to a change in the inside market” into the claim. After that addition, the PTO examiner allowed the claims. Similarly, TT amended future Claim 1 of the ‘304 patent to include the following: “when the inside market changes, the price levels along the common price axis do not move.” The Federal Circuit found that “the amendments clarified that the claimed price levels ‘do not move’ when the inside market changes. Therefore, the applicants clearly surrendered a [graphical user interface] with price levels that move in response to inside market changes.” In the next paragraph, the court reiterated that “during prosecution, the inventors surrendered any subject matter that moves automatically.”

II. STANDARD

Summary judgment is proper when “the pleadings, the discovery and disclosure materials on file, and any affidavits show that there is no genuine issue as to any material fact and that the moving party is entitled to judgment as a matter of law.” Fed. R. Civ. P. 56(c)(2). In determining whether a genuine issue of fact exists, the Court must view the evidence and draw all reasonable inferences in favor of the party opposing the motion. *See Bennington v. Caterpillar Inc.*, 275 F.3d 654, 658 (7th Cir. 2001); *see also Anderson v. Liberty Lobby, Inc.*, 477 U.S. 242, 255 (1986). However, the Court will “limit its analysis of the facts on summary judgment to evidence that is properly identified and supported in the parties’ [Local Rule 56.1] statement.” *Bordelon v. Chicago Sch. Reform Bd. of Trustees*, 233 F.3d 524, 529 (7th Cir. 2000). Where a proposed statement of fact is supported by the record and not adequately rebutted, the court will accept that statement as true for purposes of summary judgment. An adequate rebuttal requires a citation to specific support in

the record; an unsubstantiated denial is not adequate. *See Albiero v. City of Kankakee*, 246 F.3d 927, 933 (7th Cir. 2001); *Drake v. Minn. Mining & Mfg. Co.*, 134 F.3d 878, 887 (7th Cir. 1998) (“Rule 56 demands something more specific than the bald assertion of the general truth of a particular matter[;] rather it requires affidavits that cite specific concrete facts establishing the existence of the truth of the matter asserted.”).

III. DISCUSSION

A. The Written Description Requirement and the Burden of Proof

The moving defendants assert, albeit for different reasons, that parts of the claims of both the ‘056 and ‘411 patents do not meet the “written description requirement.” Section 112, paragraph 1 of the Patent Act sets out the written description requirement; specifically, § 112 requires “[t]he specification shall contain a written description of the invention” 35 U.S.C. § 112 ¶ 1. “The purpose of the written description requirement is to ensure that the scope of the right to exclude, as set forth in the claims, does not overreach the scope of the inventor’s contribution to the field of art as described in the patent specification.” *ICU Med., Inc. v. Alaris Med. Sys. Inc.*, 558 F.3d 1368, 1376 (Fed. Cir. 2009) (the written description requirement protects the “quid pro quo” between inventors and the public, whereby “the public receives meaningful disclosure in exchange for being excluded from practicing the invention for a limited period.”) (internal citations and quotations omitted.)

To satisfy the written description requirement, the disclosure in the specification at issue must “reasonably convey [] to those skilled in the art that the inventor had possession of the claimed subject matter as of the filing date.” *Ariad Pharms., Inc. v. Eli Lilly & Co.*, 598 F.3d 1336, 1351 (Fed. Cir. 2010). In other words, “[w]hile a prior application need not contain precisely the same

words as are found in the asserted claims” (*Poweroasis, Inc. v. T-Mobile USA, Inc.*, 522 F.3d 1299, 1306 (Fed. Cir. 2008)), the applicant must “convey with reasonable clarity to those skilled in the art that, as of the filing date sought, he or she was in possession of the invention . . . [t]he invention is, for purposes of the ‘written description’ inquiry, whatever is now claimed.” *ICU Med.*, 558 F.3d at 1376. The description “need not recite the claimed invention in haec verba but must do more than merely disclose that which would render the claimed invention obvious.” *Id.* Put another way, the description must “actually or inherently disclose the claim element.” *Poweroasis*, 522 F.3d at 1306. “The very essence of inherency is that one of ordinary skill in the art would recognize that a reference unavoidably teaches the property in question.” *Agilent Techs., Inc. v. Affymetrix, Inc.*, 567 F.3d 1366, 1383 (Fed. Cir. 2009). Where the claims go beyond what is described in the specification, the claims are invalid under § 112 for lack of a written description. *See LizardTech, Inc. v. Earth Res. Mapping, Inc.*, 424 F.3d 1336, 1346-47 (Fed. Cir. 2005).

The test of whether an invention meets the written description requirement “requires an objective inquiry into the four corners of the specification from the perspective of a person of ordinary skill in the art.” *Ariad Pharms.*, 598 F.3d at 1351. That inquiry “is a question of fact” that “will necessarily vary depending on the context.” *Id.* However, compliance with the written description requirement is amenable to summary judgment “in cases where no reasonable fact finder could return a verdict for the non-moving party” (*see Poweroasis*, 522 F.3d at 1307), and courts regularly resolve written description questions referencing solely the specification itself. *See e.g., Centocor Ortho Biotech, Inc. v. Abbott Labs.*, 636 F.3d 1341, 1347 (Fed. Cir. 2011) (“[a] patent also can be held invalid for failure to meet the written description requirement based solely on the face of the patent specification.”); *Anascope, Ltd. v. Nintendo of Am., Inc.*, 601 F.3d 1333, 1339 (Fed. Cir.

2010) (finding an expert’s conclusion “cannot override the objective content” of the specification at issue); *All Dental Prodx, LLC v. Advantage Dental Prods., Inc.*, 309 F.3d 774, 778-79 (Fed. Cir. 2002) (reviewing the specification and finding no genuine fact dispute that the specification described the claimed invention).

Because a patent is presumed to be valid (*see* 35 U.S.C. § 282), the moving defendants must show by clear and convincing evidence that the claims at issue are invalid or should be limited because they do not meet the written description requirement. *See Hynix Semiconductor, Inc. v. Rambus Inc.*, 645 F.3d 1336, 1351 (Fed. Cir. 2011); *Tech. Licensing Corp. v. Video-Tek, Inc.*, 545 F.3d 1316, 1334 (Fed. Cir. 2008) (affirming trial court’s holding that there was not clear and convincing evidence that the application did not show the inventor was in possession of the invention at the time of the filing date); *see also Poweroasis, Inc.*, 522 F.3d at 1303 (noting the burden of persuasion that a patent is not valid is on the party asserting invalidity).

B. ‘056 Patent Invalidity

Here, the parties dispute whether the following claim language, submitted to the PTO in 2007 as part of the amended claims that later became the ‘056 patent’s claims, meets the written description requirement:

receiving a user input indicating a default quantity to be used to
determine a quantity for each of a plurality of orders to be placed by
the user at one or more price levels.

(*See* Doc. 396-1, ‘056 Patent, at Col. 14.) As the moving defendants point out, and TT does not dispute, if the disputed claim language was not adequately described in the 1999 specification, the ‘056 patent’s claims would not have the 1999 priority date from the ‘550 application but rather the 2007 date when they were filed, and consequently, they would be invalid as anticipated by numerous

pieces of prior art, including one of TT's products. Therefore, the specification at issue for the comparison is the 1999 specification submitted with the '550 application, which is identical to the '056 patent's specification in all relevant respects. In short, the question for the Court under § 112 is whether the specification, filed in 1999, showed that the inventor was in possession of the invention claimed by the disputed language.

In their reply brief, the moving defendants concede that the specification shows the inventors were in possession of the concept of using a default quantity at the time of filing. Though the moving defendants only concede that point for the purposes of the current motion, and the specification does not use the exact words "default quantity," the Court notes that the specification clearly demonstrates a default quantity because a default quantity is inherent in the tokens in the priority view. As mentioned above, without any action from the trader, those tokens do not change in size (and thus in quantity) between orders, and the specification does not disclose that they ever reset to zero. For instance, if a trader adjusts the token to a quantity of 100, he could use that same token size, and thus the same quantity, for every subsequent order at any price level. In short, because the token always has a size, it inherently always represents a quantity that can be used over and over without change. In other words, the trader does not have to adjust the quantity for every order, but rather may use a preset quantity from a previous order.

Although the moving defendants concede the default quantity point, they assert that the specification does not disclose the method step; that is, the specification has no disclosure of the step of "receiving a user input indicating a default quantity" that then is used "to determine a quantity for each of a plurality of orders" placed at various order levels. According to the moving defendants, even if the tokens do not change in size between orders and constitute a default quantity, there is no

disclosure that “it is a default quantity that is indicated by a user input – which is what the claims require – as opposed, for example, to being a factory setting that is used unless overridden by a user input.” (Doc. 409 at 8.) According to the specification, however, it is the trader that determines the size of the token in the priority view, and thus it is the trader that determines the default quantity that may be used over and over. In other words, the system receives a user input (a trader sizing the token), which indicates a default quantity (as discussed above), which the trader may then use to place multiple orders.

The moving defendants also suggest that the specification does not disclose the method step because a trader has to drag the token over to the right side of the screen each time he wants to place an order using that particular quantity. According to the moving defendants, the trader has to repeat this process for each and every order at that same quantity. But the claim language concerns setting the default quantity to be used for multiple orders, not how the trader submits the order. It is the sizing of the token that sets the default quantity; not the dragging; dragging is the action that starts the order submission process. Put another way, the trader does not need to repeat the process of selecting a quantity, but does need to repeat the process of submitting the specific order for a quantity at a specific price. In sum, the way that the specification describes the priority view inherently discloses a default quantity selected by the user and used for multiple orders. No reasonable factfinder could find otherwise (*see Centocor*, 636 F.3d at 1347), and the Court grants TT’s cross-motion for summary judgment and denies the moving defendants’ motion.

C. ‘411 Invalidity Under the *eSpeed* Decision

Next, the moving defendants assert that the ‘411 patent’s claims, which are not limited to a static price axis (but rather claim price axes in general), are invalid for lack of a written description

in light of the Federal Circuit’s *eSpeed* Decision. As described above, in that decision the Federal Circuit considered the same specification at issue here, because the ‘411 patent asserted by TT here is a continuation of the ‘132 patent considered by that court.¹¹

As TT notes, the ‘132 patent’s claims are limited to “static display of prices,” and the part of the *eSpeed* Decision cited by the moving defendants considered the district court’s construction of the term “static display of prices” (for the ‘132 patent) and “common static price axis” (for the ‘304 patent),¹² specifically zeroing in on “static.” In other words, the relevant part of the *eSpeed* Decision did explicitly opine on the scope of the specification under § 112 or find that the claims of ‘132 or ‘304 patents did not meet the written description requirement. TT’s observation is true as far as it goes, but it is also true that in the *eSpeed* Decision, the Federal Circuit made a number of findings regarding the specification in the course of affirming the claim construction that are dispositive here. That is not surprising, given the starring role the specification plays in claim construction. *See eSpeed*, 595 F.3d at 1352 (claims “must be read in view of the specification, of which they are a part,” and “[a] patent’s specification is always highly relevant to the claim construction analysis.”) (internal citations omitted); *see also Vitronics Corp. v. Conceptronic, Inc.*, 90 F.3d 1576, 1582 (Fed. Cir. 1996) (“the specification . . . is the single best guide to the meaning of a disputed term.”).

Most notably, in its review of the district court’s claim construction ruling, the Federal Circuit emphasized that the *invention* described in the specification—not merely a preferred

¹¹As mentioned above, because the ‘304 patent is a division of the ‘132 patent, the ‘304 patent also has the same specification for present purposes as the ‘411 patent. *See eSpeed*, 595 F.3d at 1340.

¹²At the Federal Circuit TT agreed that the difference between “static display of prices” and “common static price axis” is immaterial. 595 F.3d at 1352.

embodiment—was an improvement on the prior art specifically because the price axis *did not move*. See *id.* at 1354 (“allowing the price axis to automatically change positions would defy the invention’s goal to ‘ensure fast and accurate execution of trades.’”); *id.* at 1353 (taking “comfort” that the specification used the term “the present invention” rather than “a preferred embodiment.”); see also 35 U.S.C. § 112 ¶ 1 (“The specification shall contain a written description of the *invention*”). Indeed, the Federal Circuit explicitly considered price axes that move (through automatic re-centering or “drift”) in that opinion. With respect to those moving axes, the court emphasized repeatedly that according to the specification, a static price axis allowed for more accurate order entry. That finding was not based on the specific language of the claims of the ‘132 patents (which, of course, are different than the claims of the ‘411 patent); rather, it was an observation based on the specification itself, and what the specification asserts is novel about the invention. As a corollary, the court also noted, explicitly, that if the patent claimed a price axis that moved, it would be claiming material that would lead to the very problem the invention—according to the specification—sought to address.

In sum, the ‘411 patent’s claims are broad enough to encompass price axes that move automatically (or re-center automatically). The Federal Circuit based its decision as to claim construction for the ‘132 and ‘304 patents on the premise that the invention described in the specification was limited to static price axes that move only with manual re-centering. Put another way, given that § 112 questions and claim construction questions look to the specification first and foremost, the Court cannot ignore the Federal Circuit’s interpretation of specification (and the definition of the invention disclosed in the specification) simply because those findings were made as part of the claim construction context. Any decision by this Court that the ‘411 patent’s claims

fully meet the written description requirement would be at odds with the Federal Circuit’s binding findings in the *eSpeed* Decision. Consequently, to the extent that ‘411 patent’s claims seek to cover price axes that move automatically or re-center automatically, rather than static price axes that require manual re-centering, they are invalid and the Court grants the moving defendants’ motion for summary judgment and denies TT’s cross-motion.¹³ As TT conceded in its briefing, the Court’s finding effectively decides the priority issue raised in Tradestation’s motion for summary judgment and Tradestation’s motion is denied as moot. (See TT Memo., Doc. 395, at 28 (“[t]here is no need, or reason, for this Court to delve into [the priority] issue for the simply reason that the specification of the ‘411 patent is identical to the specification of the ‘132 and ‘304 patents If the ‘411 patent claims do not have sufficient written description support, they are invalid and the issue of priority is moot.”))

D. OEC’s Motion for Summary Judgment¹⁴

Finally, OEC moved, by itself, for summary judgment, asserting that the prosecution history estoppel found by the Federal Circuit in the *eSpeed* Decision with respect to the ‘132 and ‘304 patents, the parents of the Brumfield family of patents, also applies to a subset of continuations of those patents, namely the ‘382, ‘996 and ‘055 patents (together, the “Brumfield children”). “Under the doctrine of the equivalents, a product or process that does not literally infringe the express terms

¹³ Because the Court finds, based on the *eSpeed* Decision, that the ‘411 patent’s claims are invalid under § 112 to the extent they claim price axes that move automatically, the Court does not reach the issue raised in TT’s cross-motion of whether, the *eSpeed* Decision aside, the ‘411 patent’s claims meet the written description requirement. (See Doc. 395 at 8.)

¹⁴ OEC moved for summary judgment with respect to two subgroups of the Brumfield family of patents, which OEC labeled “Brumfield Patent Set 1” (earlier patents) and “Brumfield Patent Set 2” (later patents). With respect to Brumfield Patent Set 2, which includes the ‘411 patent, OEC’s motion is an alternative to the moving defendants’ motion that the ‘411 patent’s claims do not meet the written description requirement, to be considered only if the Court denied the other defendants’ motion. (See Doc. 379 at 28 n. 2.) Because the Court granted that motion, it will deny as moot OEC’s motion with respect to the patents in Brumfield Patent Set 2.

of a patent claim may nonetheless be found to infringe if there is “equivalence” between the elements of the accused product or process and the claimed elements of the patented invention.” *Duramed Pharms., Inc. v. Paddock Labs., Inc.*, 644 F.3d 1376, 1380 (Fed. Cir. 2011) (internal citation omitted). However, “the doctrine of prosecution history estoppel prevents a patent owner from recapturing through the doctrine of equivalents subject matter surrendered to acquire the patent.” *Id.* (citing *Festo Corp. v. Shoketsu Kinzoku Kogyo Kabushiki Co.*, 535 U.S. 722, 734 (2002)).

As described above, in the *eSpeed* Decision the Federal Circuit found that TT amended the representative claims of the ‘132 and ‘384 patents to include the limitation “wherein the static display of prices does not move in response to a change in the inside market” to the ‘132 patent and “when the inside market changes, the price levels along the common static price axis do not move” to the ‘304 patent. The Federal Circuit concluded that based on these amendments, TT “clearly surrendered a GUI with price levels that move in response to inside market changes” and “surrendered any subject matter that moves automatically.” In other words, by the Federal Circuit found that inserting the limitation of “common static price axis” into the claims of the ‘304 patent prevented TT from asserting that products with price axes that move automatically or with automatic re-centering infringe under the doctrine of equivalents.

Here, the issue is whether the Federal Circuit’s prosecution history estoppel finding as to the parent patents applies to the Brumfield children. When, as here, “multiple patents derive from the same initial application, the prosecution history regarding a claim limitation in any patent that has issued applies with equal force to subsequently issued patents that contain the same claim limitation.” *Elkay Mfg. Co v. Ebco Mfg. Co.*, 192 F.3d 973, 980 (Fed. Cir. 1999). In other words, “as long as the same claim limitation is at issue, prosecution disclaimer made on the same limitation

in an ancestor application will attach.” *Omega Eng’g, Inc. v. Raytek Corp.*, 334 F.3d 1314, 1333 (Fed. Cir. 2003); *see also Biovail Corp. Int’l v. Andrex Pharms., Inc.*, 239 F.3d 1297, 1301 (Fed. Cir. 2001) (same); *Jonsson v. Stanley Works*, 903 F.2d 812, 818 (Fed. Cir. 1990) (holding that when two patents issued from continuation-in-part applications derived from one original application, the prosecution history of a claim limitation in the first patent to issue was properly applied to the same claim limitation in the second patent to issue).

For instance, in *Omega Engineering*, the Federal Circuit considered two patents with a common ancestor application. 334 F.3d at 1318. During the prosecution of the earlier patent, the court found the applicants clearly limited the claim scope in response to prior art, and the court considered whether that disclaimer should extend to the second patent. *Id.* at 1327, 1333. The court noted that the term at issue was the same in the later patent, and “presume[d], unless otherwise compelled, that the same claim term in the same patent or related patents carries the same construed meaning.” *Id.* at 1334. The court concluded that “the disclaimer from the prosecution of the [earlier patent] attaches to the construction of the [later continuation patent] and narrows the broad scope of the asserted claims.” *Id.* at 1333. Similarly, in *Biovail*, the applicant included a limitation in its claims in an earlier patent after the PTO initially rejected them as anticipated by a piece of prior art. 239 F.3d at 1301. A second patent, issuing from the same application, included the same limitation. *Id.* The court found that the limitation appears in a “similar context” in both patents, and concluded that the prosecution history of the first patent as to the limitation at issue (which included prosecution of the common application) “applies with equal force” to the limitation in the second patent. *Id.* In constructing the claim in the later patent, the court applied statements that the applicant made in the prosecution of the earlier patent. *Id.*

Here, all the Brumfield children’s claims include the limitation of “common static price axis,” just like the ‘304 patent, and flow from the same specification as the ‘304 patent (in the case of the ‘382 and ‘996 patent), or a similar specification (in the case of the ‘056 patent). Even a cursory review of the claims of the Brumfield children demonstrates that they use “static price axis” in the same context as the ‘304 patent. *See id.* Indeed, in many instances, the claim paragraphs that contain “static price axis” in the ‘304 patent are identical to the paragraphs containing “static price axis” in claims of the Brumfield children. Where the same claim term is at issue in the same context, TT’s disclaimer as to the ‘304 patent applies to the Brumfield children.¹⁵

The cases cited by TT against the proposition that a disclaimer as to the parent does not act against other patents in a family with the same claim term are distinguishable. In *Monsanto Co. v. Bayer Bioscience*, 363 F.3d 1235 (Fed. Cir. 2004), the district court applied collateral estoppel and required that a particular claim term concerning insect-resistant plants to be construed in the same way as the term was when the same parties litigated another patent a few years before. *Id.* at 1243-44. The Federal Circuit reversed, noting that unlike here, the specifications for the two patents were different (the second patent was not a continuation of the first) and the specification for the second patent supported a different construction of the common term. *Id.* at 1244. In the other case TT cites, *Medrad, Inc. v. MRI Devices Corp.*, 401 F.3d 1313 (Fed. Cir. 2005), the plaintiff asserted that a particular claim term in the patent-in-suit, which related to the coils used in MRI machines, should be constructed in the same way that the Federal Circuit constructed the term in a case involving an

¹⁵TT argues that the disclaimer should not apply to the ‘055 patent is only a continuation-in-part of the ‘304 patent and its specification is different than the common specification for the ‘132, ‘304, ‘384 and ‘996 patents. That the ‘055 patent is only a continuation-in-part makes no difference. *See Omega Eng’g*, 334 F.3d at 1335 (“it is settled that prosecution disclaimer attaches to progeny continuation in part applications where the same claim limitation is at issue.”)

unrelated patent for a cast for dishwashing machines. *Id.* at 1318. The court disagreed, noting the simple and unremarkable proposition that “a particular term used in one patent need not have the same meaning when used in an entirely separate patent, particularly one involving different technology.” *Id.* Nor is this case like *Saunders Group, Inc. v. Comfortrac, Inc.*, 492 F.3d 1326 (Fed. Cir. 2007). In that case, the court did not apply the disclaimer from the prosecution in the related patent because the patent-in-suit omitted the limitation at issue, and the related patent had it. *Id.* at 1333.¹⁶

Finally, TT asserts that the prosecution histories of the Brumfield children are different than the parent ‘304 patent and that TT explicitly told the patent examiner in the prosecution of the children that having “static” in the claims did not operate to limit the claims to price axes that do not move absent manual re-centering, and that whether a price axis is “static” is “not defined by how it is re-centered.” But *Elkay, Omega Engineering* and the other caselaw cited above is concerned about consistency of constructing claims. If the TT’s self-serving statement negates, as to the Brumfield children, the disclaimer the Federal Circuit found as to the parent, then TT would be able to assert “common static price axis” means one thing for one patent in the family, and something else for another patent in the same family. In any event, TT’s argument is beside the point. The Federal Circuit clearly determined that whether a price axis is static is determined by how it is re-centered, and regardless of what TT told the patent examiner, the Federal Circuit found that by inserting “common static price axis” into the claims of the ‘304 patent, TT gave up all price axes that move automatically. TT put the same language in the Brumfield children. The legal effect of putting in

¹⁶ *Saunders* is consistent with *Elkay* and *Omega Engineering*. In *Saunders*, the court remarked that, “[t]he fact that the prosecution history relied upon was created in connection with the parent application would be unimportant if the claim language at issue were present in both patent applications.” 492 F.3d at 1333.

that language is no different for the Brumfield children than the ‘304 patent considered by the Federal Circuit. In sum, TT is estopped from asserting that any of the claims of the Brumfield children can be infringed under the doctrine of equivalents by a product that has a price axis that moves automatically or re-centers automatically.

IV. CONCLUSION

For the foregoing reasons, the Court finds the following:

1. grants TT’s cross-motion for summary judgment (Doc. 393) and denies the moving defendants’ motion (Doc. 372) with respect to the ‘056 patent;
2. grants the moving defendants’ motion for summary judgment (Docs. 375/378) that under the *eSpeed* Decision, the ‘411 patents claims are invalid to the extent they cover price axes that move automatically or through automatic re-centering and denies TT’s cross-motion that the ‘411 patent’s claims meet the written description requirement (Doc. 394);
3. denies as moot Tradestation’s motion for summary judgment (Docs. 178/181) concerning the priority issue of the ‘411 patent;
4. grants OEC’s motion for summary judgment regarding prosecution history estoppel (Doc. 377) with respect to the first set of Brumfield family patents, denies it as moot with respect to the second set of Brumfield family patents, and denies TT’s cross-motion (Doc. 394).

Per the Court's scheduling order (Doc. 217), the parties are directed to meet-and-confer regarding this decision and submit a joint statement three days before the next status hearing setting out the parties' position concerning the scope and timing of discovery going forward, and should include the parties positions concerning the procedure outlined in *In re Katz Interactive Call Processing Patent Litigation*, 639 F.3d 1303 (Fed. Cir. 2011).



Virginia M. Kendall
United States District Court Judge
Northern District of Illinois

Date: February 9, 2012